

ABSTRACT OF THE DISCLOSURE

A computer model simulation for an MRAM cell. In one example, the MRAM cell includes a magnetic tunnel junctions (MTJ) with multiple free magnetic layers. In one embodiment, the simulation implements a state machine whose states variables transition based on indications of magnetic fields passing thresholds. In one embodiment, the conductance values utilized from the model are derived from measured data that is curve fitted to obtain first and second order polynomial coefficient parameters to be used in the model.